

REMARKS

After entry of the instant Amendment, claims 1-21 remain in the instant application, with claims 1, 10, 15, and 19 in independent form. Claim 7 has been amended to address an objection to the claim form by the Examiner and to further clarify that iron oxide contained in component (B) is the source of ferrous ions for purposes of this claim, support for which can at least be found in paragraph [0014] on pages 3 and 4 of the application as filed. Claim 17 has been amended for grammatical purposes. Claim 20 has been amended to address an objection to the claim form by the Examiner and to clarify that the source of ferrous ions claimed therein is present as an impurity in an inorganic filler, and claim 21 has been similarly amended to claim 20. Support for the amendments to claims 20 and 21 can at least be found in paragraph [0014] on pages 3 and 4 of the application as filed. Claim 22 is presently cancelled. No new claims are presently added. The specification of the application has also been amended to more properly describe “pyrithione” instead of “pyrithion” where applicable. The Applicants respectfully submit that no new matter is added through the amendments to the specification and the claims.

In the instant Office Action, the Examiner has objected to certain informalities in claims 7, 20, and 21, and in the specification. The Applicants respectfully submit that the amendments to claims 7, 20, 21, and the specification as described above adequately address the bases for the Examiner’s objections such that the Applicants respectfully request the Examiner to withdraw the objections.

Claims 7, 8, 20, and 21 stand rejected under 35 USC §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as the invention. Claims 1-6 and 9-19 stand rejected under 35 USC §103(a) as being unpatentable over Amidaïji et al. (USPN 6,451,437) alone. In view

of the amendments to claims 7, 20, and 21, and the cancellation of claim 22, the Applicants respectfully submit that the rejections under 35 USC §112, second paragraph, are overcome and must be withdrawn. With regard to the rejections under 35 USC §103(a), the Applicants respectfully traverse these rejections on the bases that: 1) Amidaiji et al. fails to adequately teach a diorganopolysiloxane composition **including a source of ferrous ions**, 2) Amidaiji et al. fails to teach a bis (2-pyridylthio-i-oxide) non-ferrous metal salt present in a diorganopolysiloxane composition **in the amounts claimed**, 3) that the amounts of the bis (2-pyridylthio-i-oxide) non-ferrous metal salt present in the diorganopolysiloxane composition as claimed provide significant unexpected results that present significant indicia of non-obviousness, 4) that Amidaiji et al. fails to recognize any interaction whatsoever between ferrous ions and pyridiones disclosed therein, especially at the amounts claimed, further proving non-obviousness of the instant invention as claimed, and that 5) countless possible combinations of pigment, bis (2-pyridylthio-i-oxide) non-ferrous metal salt, and solvent are possible in Amidaiji et al. and Amidaiji et al. does not contain sufficient teaching of the specific combinations of those components, along with amounts of those components, necessary to arrive at the instantly claimed composition.

As to the Rejections of Claims 7, 8, 20, and 22 Under 35 USC §112, Second Paragraph

The Applicants respectfully submit that these rejections have been overcome through the instant amendments to the claims. In particular, claims 7 and 8 were rejected based upon lack of clarity as to whether the iron oxide of claim 7 is the source of ferrous ions referred to in claim 1. In view of the amendments to claim 7, the Applicants have now made clear that the iron oxide claimed in claim 7 is, in fact, the source of ferrous ions referred to in claim 1 (with support in the specification for this amendment noted above).

Claims 20 and 21 were rejected based upon lack of clarity of the claim language specifying that the “source of ferrous ions comprises an impurity”. This claim language has been clarified to make it clear that the source of ferrous ions is present as an impurity, which clarifies any possible confusion regarding the claim language at issue (with support in the specification for the amendment noted above).

Finally, claim 22 has been cancelled, thereby rendering the 35 USC §112 rejections of this claim moot.

In view of the foregoing, the Applicants respectfully submit that all rejections under 35 USC §112 have been overcome such that these rejections must be withdrawn.

Rejections of Claims 1-6 and 9-19 Under 35 USC §103(a) Over Amidaiji et al.

Prior to addressing these rejections, the Applicants note that significant unexpected results were achieved with the instant invention as claimed in terms of inhibiting or reducing discoloration of diorganopolysiloxane compositions by including a source of ferrous ions and the claimed amount of bis (2-pyridylthio-1-oxide) non-ferrous metal salt. Referring to the Examples in the instant application, when diorganopolysiloxane compositions are cured on a Teflon[®] sheet and maintained for 18 weeks at 40 °C, Δb and ΔE values are significantly higher (as compared to color of cured films when aged for 7 days at 25 °C) when bis (2-pyridylthio-1-oxide) non-ferrous metal salt is removed from the diorganopolysiloxane compositions (see Comparative Example 1). Further, as is apparent from Practice Example 6, the Δb and ΔE values trend closer to the Δb and ΔE values obtained for Comparative Example 1 when as little as 0.05% by weight of the bis (2-pyridylthio-1-oxide) non-ferrous metal salt is included in the diorganopolysiloxane compositions (as compared to Practical Examples 1-5, which have lesser amounts of the bis

(2-pyridylthio-1-oxide) non-ferrous metal salt present therein). Indeed, the Applicants have even indicated that if too much of the bis (2-pyridylthio-1-oxide) non-ferrous metal salt is present in the diorganopolysiloxane composition, a cured body obtained from the diorganopolysiloxane composition will turn blue (see paragraph [0019] on page 5 of the original application as filed).

The Applicants respectfully submit that the sum of the results in the Practical Examples proves the significance of the presence of the bis (2-pyridylthio-1-oxide) non-ferrous metal salt in the diorganopolysiloxane compositions along with the source of ferrous metal ions, and further proves the significance of the claimed amounts of the bis (2-pyridylthio-1-oxide) non-ferrous metal salt within the diorganopolysiloxane compositions. Such results are **clearly unexpected**, and the Examiner has made no showing whatsoever to suggest that such results would be expected.

In the wake of *KSR v. Teleflex*, the weight of unexpected results has taken on added significance as evidenced by the recent case of *Sanofi-Synthelabo, Inc. v. Apotex*, 550 F.3d 1075 (Fed. Cir. 2008). In *Sanofi*, a strong *prima facie* case of obviousness was effectively overcome through the showing of strong unexpected results for a simple enantiomer of a disclosed compound. Like in *Sanofi*, strong unexpected results are presented in the instant application, and the Examiner cannot ignore such unexpected results when ultimately making conclusions as a result of an obviousness analysis of the instant claims.

With regard to the rejections of the instant claims under 35 USC §103(a) over Amidaiji et al., notwithstanding the unexpected results described above, the Examiner is respectfully reminded of the requirements to establish a *prima facie* case of obviousness. As the Examiner is aware, *Graham v. John Deere* provides the basic framework for

performing the obviousness inquiry, and the Supreme Court has recently reaffirmed the standards set forth in *Graham v. John Deere* in the decision of *KSR International Co. v. Tele-flex Inc. (KSR)*, 550 U.S. ___, 82 USPQ2d 1385 (2007). In the wake of *KSR*, it is clear that many established tests that have been used in the past to prove or disprove obviousness of claims, while still useful to perform the obviousness inquiry, cannot be rigidly applied. MPEP 2141(II.) rightly summarizes the more global approach that is to be taken with regard to the obviousness inquiry in the wake of *KSR* by indicating that “the focus when making a determination of obviousness should be on what a person of ordinary skill in the pertinent art **would have known at the time of the invention, and on what such a person would have reasonably expected to have been able to do in view of that knowledge**” (emphasis added).

The Applicants respectfully submit that the sum of weighing all factors necessary for a person of ordinary skill in the art to arrive at the instant invention as claimed, based upon teachings provided in Amidaiji et al., and based upon the lack of any recognition whatsoever in Amidaiji et al. of beneficial results relative to inhibition or reduction of discoloration in cured diorganopolysiloxane compositions when a source of ferrous oxide and the bis (2-pyridylthio-1-oxide) non-ferrous metal salt (in the specified amount range) is included in the diorganopolysiloxane composition. First, the Applicants note that the Examiner’s position of obviousness relies upon the teaching of iron oxide pigments in Amidaiji et al. for purposes of finding a teaching of a source of ferrous ions therein. The Applicants respectfully submit that the Examiner’s findings in this regard are improper. In particular, based merely upon a teaching in Amidaiji et al. of the presence of pigments (which is not surprising given the fact that Amidaiji et al. is primarily concerned with a

paint composition), including iron oxides in general, there is nothing whatsoever that directs one of skill in the art to specifically utilize iron oxides that are a source of ferrous ions. The pigment is **only** taught by Amidaiji et al. to act as such, with no further benefits recognized therein relative to selection of any particular pigment.

Further, for purposes of finding a teaching of the instantly claimed ranges for the bis (2-pyridylthio-1-oxide) non-ferrous metal salt within Amidaiji et al., the Examiner was forced to make a creative argument that relies upon teachings in Amidaiji et al. of the possibility of high amounts of solvent present in the compositions for purposes of lowering the relative amount of the pyrithione that would thereby be present therein. Still, the Applicants respectfully submit that teachings of Amidaiji et al. of possible use of high amounts of solvents cannot be used to show that amounts of pyrithione within the instantly claimed ranges are taught by Amidaiji et al. For one, specific teachings of Amidaiji et al. (such as the Examples) include solvents in the compositions in relatively low amounts that do not result in the pyrithione being present in the instantly claimed ranges. Further, there is no connection in Amidaiji et al. between the amount of solvent and the amount of pyrithione; the amount of solvent disclosed in Amidaiji et al. only relies upon the amount of component (A) the organopolysiloxane for the weight basis thereof. Amounts of the pyrithione are set forth using as a basis the entire amount of the composition or the amount of solids present in the composition. There is no indication that even a high amount of solvent relative to component (A) necessarily correlates to a low solids content of the composition; many other components are possibly included in the coating composition, and such additional components (such as pigments, anti-settling agents, etc.) clearly have an effect on solids content of the composition. Thus, the Applicants respectfully submit that

there is no teaching within Amidaiji et al. of the bis (2-pyridylthio-1-oxide) non-ferrous metal salt present in the compositions taught therein in the amounts as instantly claimed

Turning to the issue of what one of skill in the art would have known at the time of the invention based upon the teachings of Amidaiji et al., and on what such a person would have reasonably expected to have been able to do in view of that knowledge, the Applicants respectfully submit that one of skill in the art **clearly** would not reasonably have been expected to both select an iron oxide pigment that is a source of ferrous ions, and to include bis (2-pyridylthio-1-oxide) non-ferrous metal salt in the diorganopolysiloxane composition in the amount claimed. This is especially the case because Amidaiji et al. contains no teaching whatsoever that would direct one of skill in the art to take such steps, and there is no teaching in Amidaiji et al. of any benefit whatsoever of this combination. Further, the Applicants respectfully submit that specific teachings of Amidaiji et al. do not direct a person of skill in the art to use the extremely high amounts of solvent necessary to even make a case that the instantly claimed amounts of bis (2-pyridylthio-1-oxide) non-ferrous metal salt should be used based upon the teachings of Amidaiji et al. Based upon the confluence of all of these factors, coupled with the clear unexpected results illustrated for the instant invention as claimed, the Applicants respectfully submit that a person of ordinary skill in the art would **not** reasonably have been expected to practice the instant invention based upon the teachings of Amidaiji et al.

In view of the foregoing, the Applicants respectfully submit that the Examiner's obviousness rejections of independent claims 1, 10, 15, and 19 over Amidaiji et al. have been overcome such that these rejections must be withdrawn. Thus, the Applicants respectfully submit that independent claims 1, 10, 15, and 19, as well as the claims that

depend therefrom, are in condition for allowance, which allowance is respectfully requested.

This Amendment is timely submitted such that it is believed that no fees are presently due. However, the Commissioner is authorized to charge our deposit account no. 08-2789 for any additional fees or credit the account for any overpayment.

Respectfully submitted,

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